Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A bottle sterilizing system comprising:

a plurality of inverted bottles, each inverted bottle having an interior and exterior surface, a body portion and an opening, said opening having a width smaller than the width of the body portion that prevents introduction of particles from a source located exteriorly of the bottle from impinging directly on at least a portion of the interior surface of each bottle;

a source of a liquid sterilizing agent;

means for introducing said sterilizing agent onto the interior surface of said inverted bottle from a location exterior to said opening in the form of discrete atomized liquid particles by contacting the bottle interior surface with said particles to form at least a thin liquid film thereon, present in sufficient concentration to substantially eliminate microbial contamination on the interior surface of said bottle after being in contact with said liquid film for a sufficient period of time; and

means for substantially removing said sterilizing agent from said bottle interior surface after said bottle is sterilized as desired.

2. (original) The system of claim 1 wherein said contact occurs by said particles impinging and dissipating upon the bottle surface thereby substantially wetting said surface.

3. (original) The system of claim 1 wherein said sterilizing agent is introduced so as to promote condensation of said particles onto the bottle surface.

4. (previously presented) The system of claim 3 wherein said sterilizing agent is introduced in a supersaturated fog to promote condensation of said particles onto the bottle surface.

5. (original) The system of claim 1 wherein said sterilizing agent source is selected from a group consisting of an ultrasonic energy atomizer, a fog generator, hydraulic atomizer nozzle, or an air atomizer.

6. (original) The system of claim 1 wherein said liquid droplets are in a form selected from the group consisting of a fog, a vapor, a mist, and an aerosol suspension.

7. (original) The system of claim 1 wherein all the bottle's surfaces are contacted with sterilizing agent.

8. (original) The system of claim 1 wherein said sterilizing agent is introduced in a closed chamber.

9. (original) The system of claim 8 wherein said closed chamber is adapted for increased temperature and pressure to promote condensation of sterilizing agent on the surfaces of said bottle.

10. (original) The system of claim 8 wherein the temperature of the sterilizing agent is between 60°F and 180°F.

11. (original) The system of claim 1 wherein said sterilizing agent comprises hydrogen peroxide and peracetic acid.

12. (original) The system of claim 1 further comprising means for inverting the bottle before introducing said sterilizing agent.

13. (original) The system of claim 1 wherein said sterilizing agent is removed from the bottle surface by rinsing said bottle with water.

14. (original) The system of claim 1 wherein said sterilizing agent is removed from the bottle surface with compressed air.

15. (original) The system of claim 1 wherein said system is operated in a cold-fill liquid product filling operation.

16. (previously presented) A bottle sterilization process comprising:

providing at least one inverted bottle having an interior and exterior surface, a body portion and an opening, said opening having a width smaller than the width of the body portion that prevents introduction of particles from a source located

exteriorly of the bottle from impinging directly on at least a portion of the interior surface of each bottle;

introducing a sterilizing agent in the form of discrete atomized liquid particles from a location exterior to said opening onto the interior bottle surface;

contacting the bottle surface with said particles whereby said particles form a thin liquid film on the entire interior bottle surface;

maintaining the sterilizing agent on the surface of said bottle for a fixed period of time sufficient to reduce to a desired level the amount of active microorganisms on said interior surface; and

removing said sterilizing agent from substantially all the interior and exterior surfaces after said surfaces are sterilized as desired.

17. (original) The method of claim 16 wherein said particles impinge and dissipate upon said bottle surface.

18. (original) The method of claim 16 wherein said sterilizing agent is introduced so as to promote condensation of said particles onto the interior bottle surface.

19. (previously presented) The method of claim 18 wherein said sterilizing agent is introduced in a supersaturated fog to promote condensation of said particles onto the interior bottle surface.

20. (original) The method of claim 16 wherein sterilizing agent is introduced by an ultrasonic energy atomizer, a fog generator, a hydraulic atomizer nozzle, or an air atomizer.

21. (original) The method of claim 16 wherein said liquid particles are introduced in a form selected from the group consisting of a fog, a vapor, a mist or an aerosol suspension.

22. (original) The method of claim 16 wherein said sterilizing agent is introduced in a closed chamber.

23. (original) The method of claim 16 wherein said closed chamber is adapted for elevated temperature and pressure to promote condensation of the sterilizing agent.

24. (original) The method of claim 16 wherein the sterilizing agent comprises an aqueous solution containing about 27.5% hydrogen peroxide and about 5.8% peracetic acid.

25. (original) The method of claim 16 wherein said sterilizing agent is removed from the bottle surface by rinsing with water.

26. (original) The method of claim 16 wherein said sterilizing agent is removed from the bottle surface with compressed air.

27. (original) The method of claim 16 further comprising inverting the bottles before the introduction of said sterilizing agent.

28. (original) The method of claim 17 wherein the method is operated in a cold-filling liquid product filling operation.

29. (previously presented) A bottle sterilization apparatus comprising:

at least one inverted bottle having an interior and exterior surface, a body portion and an opening, said opening having a width smaller than the width of the body portion that prevents introduction of particles from a source located exteriorly of the bottle from impinging directly on at least a portion of the interior surface of said bottle;

a conveyor for moving said bottle in an inverted position;

a source of a liquid sterilizing agent in the form of atomized liquid particles;

at least one nozzle disposed under and exterior to said opening for introducing said sterilizing agent onto the interior surface of the bottle in the form of discrete atomized liquid particles by contacting the bottle interior surface with said particles to form at least a thin liquid film thereon, present in sufficient concentration to substantially eliminate microbial contamination on the surfaces of said bottle in contact with said liquid film; and

a rinsing device for substantially removing said sterilizing agent from said bottle surfaces after said bottle is sterilized as desired.

30. (original) The apparatus of claim 29 wherein said contact occurs by impinging and dispersing over said bottle surface.

31. (original) The apparatus of claim 29 wherein said sterilizing agent is introduced so as to promote condensation of said particles onto the bottle surface.

32. (original) The apparatus of claim 31 wherein said sterilizing agent is introduced in a supersaturated solution to promote condensation of said particles onto the bottle surface.

33. (original) The apparatus of claim 29 wherein said source of liquid sterilizing agent comprises a device selected from the group consisting of an ultrasonic energy atomizer, a fog generator, a hydraulic atomizer nozzle and an air atomizer.

34. (original) The apparatus of claim 29 wherein said atomized sterilizing agent is selected from the group consisting of a fog, a vapor, a mist and an aerosol suspension.

35. (original) The apparatus of claim 29 wherein substantially all the bottle surfaces are contacted with sterilizing agent.

36. (original) The apparatus of claim 29 wherein said sterilizing agent is introduced in a closed chamber.

37. (original) The apparatus of claim 36 wherein said closed chamber is adapted for increased temperature and pressure to promote condensation of sterilizing agent on the surfaces of said bottle.

38. (original) The apparatus of claim 29 wherein the temperature of the sterilizing agent is between 60°F and 180°F.

39. (original) The apparatus of claim 29 wherein said sterilizing agent comprises hydrogen peroxide and peracetic acid.

40. (original) The apparatus of claim 29 further comprising means for inverting the bottle before introducing said sterilizing agent.

41. (new) A bottle sterilization apparatus comprising:

at least one inverted bottle having an interior and exterior surface, a body portion and an opening;

a conveyor for moving said bottle in an inverted position;

a source of a liquid sterilizing agent in the form of atomized liquid particles;

at least one nozzle disposed under and exterior to said opening for introducing said sterilizing agent onto the interior surface of the bottle in the form of discrete atomized liquid particles by contacting the bottle interior surface while the bottle is inverted with said particles to form at least a thin liquid film thereon, present

in sufficient concentration to substantially eliminate microbial contamination on the surfaces of said bottle in contact with said liquid film; and

a rinsing device for substantially removing said sterilizing agent from said bottle surfaces after said bottle is sterilized as desired.

42. (new) A bottle sterilization process comprising:

providing at least one inverted bottle having an interior and exterior surface, a body portion and an opening;

introducing, while the bottle is inverted, a sterilizing agent in the form of discrete atomized liquid particles from a location exterior to said opening onto the interior bottle surface;

contacting the bottle surface with said particles while the bottle is inverted whereby said particles form a thin liquid film on the entire interior bottle surface;

maintaining the sterilizing agent on the surface of said bottle while the bottle is inverted for a fixed period of time sufficient to reduce to a desired level the amount of active microorganisms on said interior surface; and

removing said sterilizing agent from substantially all the interior and exterior surfaces after said surfaces are sterilized as desired.